

Docket No. LP4835USDIV
PATENT

Remarks

Claims 12 and 13 are pending in the application. Claims 1-10 were previously cancelled by this divisional filing. Claim 12 has been amended. Claims 12 and 13 stand rejected.

I. Amendments to the Claims

The amendment of Claim 12 corrects the informality noted by the Examiner. No new matter is presented. Support for the amendment of claim 12 can be found at page three.

II. Rejection under 35 U.S.C. § 103(a) by BASF (GB 709,150) in view of
Kritchevsky et. al. (US 1,810,663)

The rejection of Claims 12 and 13 under 35 U.S.C. 103(a) as being unpatentable over BASF (GB 709,150) in view of Kritchevsky et. al. (US 1,810,663) is respectfully traversed.

BASF's disclosed invention is a different method of dyeing textiles "by impregnating the articles wholly or partly with aqueous dispersions of water-insoluble vat dyestuffs, which contain the dyestuffs in a particular size of less than 10 millimicrons and drying the treated structures." In contrast to the Examiner's comments, BASF does not teach "the process of dyeing with an acid vat dye in which process, after reduction and dissolution of the dye, the dye solution is made acidic before contact with the fiber."

The Examiner cites Example 2 of GB 709,150 as disclosing an acid vat dye which is first vatted or reduced, then acidified for use in the dyeing process. Applicants

Docket No. LP4835USDIV
PATENT

respectfully traverse. In Example 2, a preparation of N,N'-dihydro-1,2,2',1'-anthraquinone-azine is first obtained by vatting the dyestuff, acidifying the vat with formic acid, filtering off the resulting vat acid, then kneading the vat acid with dextrine until the particle size is less than 10 millimicrons, and drying the resulting preparation. This material is then dispersed in water and used to dye a sample of viscose artificial silk. The Example discloses that "the vat acid is reoxidised to the vat dyestuff for the most part during the said kneading. Any remainder which has not been reoxidised undergoes reoxidation in the air in the dyebath." Thus, even when combined with dextrine, the reduced dyestuff undergoes oxidation. The dyestuff is vatted and acidified in preparation for the kneading step, not the dyeing step, as the dyeing of the artificial silk is done with the reoxidized dyestuff, not the vatted form. Finally, Example 2 does not teach, disclose, or suggest preparing a solid mixture as claimed in claims 12 or 13 of the present Application.

Kritchevsky et. al. disclose a composition of matter intended for use as a color remover or stripper for dyed fabrics. Kritchevsky et. al. teach that sodium hydrosulfite (also called sodium dithionite) is used for stripping dyes and for reducing vat dyes, and that "if the hydrosulfite particles are enveloped in a water-proof or water-resistant film, the oxygen of the air and moisture will be excluded and the substance will remain stable indefinitely." Kritchevsky et. al. teach the use of various oily substances to form the films, and for use with water solutions note the need to include an emulsifier. However, Kritchevsky et. al. do not teach, disclose, or suggest the addition of a vat acid dye to the combination of sodium hydrosulfite, an oily substance, and an emulsifier to prepare a solid mixture.

Docket No. LP4835USDIV
PATENT

The Examiner combines Kritchevsky et. al. with BASF, stating that it would have been obvious to the skilled artisan to combine the dry product of Kritchevsky et. al. as the vatting agent to reduce the dye because the product produced by Kritchevsky et. al. is a stable form of the reducing agents conventionally used to reduce vat dyes. Applicants respectfully traverse. The invention disclosed by BASF involves using aqueous dispersions of water-insoluble vat dyestuffs having particular particle size, that is, dyestuffs which are not reduced or vatted but rather are in their oxidized state. The invention disclosed by BASF has no need for a vatting agent to reduce the dye because the BASF dyestuff is used in its oxidized, insoluble form. Kritchevsky et. al. are concerned with stabilizing sodium hydrosulfite in the presence of air or moisture, that is, preventing its oxidation. There is no teaching, disclosure, or suggestion in either reference to combine the dyestuff of BASF with the stabilized sodium hydrosulfite mixture of Kritchevsky to form a solid mixture.

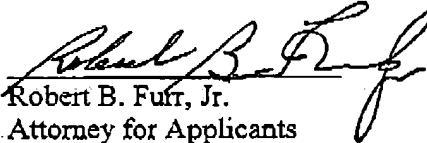
As detailed above, a *prima facie* case of obviousness is not established by BASF in view of Kritchevsky et. al., and therefore the rejection of claims 12 and 13 should be withdrawn.

Docket No. LP4835USDIV
PATENTConclusion

For at least the reasons stated above, claims 12 and 13 are believed to be in condition for allowance. Accordingly, Applicant respectfully requests that the Application be allowed and passed to issue.

Date: March 3, 2005

Respectfully submitted,



Robert B. Fuhr, Jr.
Attorney for Applicants
Registration No. 39,985
(302) 683-3299
(302) 683-3473 fax